Review of polymetallic nodules programme

5508. SHRI C. RAMACHANDRAIAH: Will the Minister of OCEAN DEVELOPMENT be pleased to state:

(a) whether the Government had appointed a Committee to review the polymetallic nodules programme;

(b) if so, whether the Committee has submitted its report;

(c) if so, what are the recommendations made; and

(d) what action is proposed to be taken by the Government?

THE MINISTER OF OCEAN DEVELOPMENT (DR. MURLI MANOHAR JOSHI): (a) Yes, Sir, pursuant to the recommendations of the Parliamentary Standing Committee for the Ministries of Science and Technology, Environment and Forest and Department of Ocean Development, the department constituted a Committee of Group of Experts to assess and review the polymetallic nodules programmes in August, 2001.

(b) Yes, Sir, the Group of Experts Committee has submitted its report on 31st March, 2002.

(c) The Committee recommended to undertake the following activities in respect of various components of the programme for the next three years to upgrade the technological and scientific knowledge base.

Survey and Exploration

- Continuation of investigations for perfecting methodologies for repid surveys *i.e.* Multi Frequency Exploration System, Backscatter data etc.;

Environmental Impact Assessment Study

- Continuation of recolonisation study for the next two years.
- Generation of predictive models for impact of deep seabed mining on the basis of data generated;

Technology Development (Mining)

- *In situ* measurement of soil bearing strength in the area.
- Development of Collector and crusher.

* Design, development and testing of Unmanned Submersible for operation upto 6000 m.

Technology Development (Metallurgy)

* Continuation of R&D work for improvement of metal recovery reduction in material/power consumption.

* A Demonstration semi continuous pilot plant of 500 kg. day at HZL.

* Validation of sulpharic acid pressure leach process route.

* Utilisation of the facility for lean ores wastes material for metal recovery.

(d) The recommendations of the Committee are being pursued by the department.

New programme for EEZ

5509 SHRI C. RAMACHANDRAIAH: Will the Minister of OCEAN DEVELOPMENT be pleased to state:

(a) whether Government propose to start a new programme for systematic research and a comprehensive survey of the EEZ;

(b) if so, what are the details of the programme;

(c) what are the benefits likely to accrue; and

(d) by when it is likely to start?

THE MINISTER OF OCEAN DEVELOPMENT (DR. MURLI MANOHAR JOSHI): (a) Yes, Sir. The Deparment of Ocean Development proposes to start a new programme for systematic research and a comprehensive bathymetric survey of the entire EEZ of India during the Tenth Plan;

(b) Under the programme the seafloor morphology of the Economic Zone extending to 200 nautical miles from the coast measuring about 2.02 millon square km., is proposed to be surveyed. The detailed three dimensional morphology is proposed to be obtained by using state-of-the-art-technology such as multi beam sonar.